

**REMARKS**

Applicant requests the Examiner to withdraw the objection to the disclosure in view of the above amendments to the specification which also correct other minor grammatical and typographical errors.

Applicant respectfully traverses the rejection of claims 1-13 under 35 U.S.C. § 103(a) as being unpatentable (obvious) over Abreu '376 in view of Lundh '834.

While Abreu '376 admittedly is very broadly directed to the problem of synchronizing base stations in a communication system, the Applicant agrees with the Examiner's following admission:

Abreu does not explicitly teach the first time difference value being due to the transmission time of the first and the at least second clock signal.

The Examiner attempts to prove *prima facie* obviousness by combining Abreu's disclosure with Lundh '834.

However, even assuming, *arguendo*, that,

Lundh teaches the first time difference value being due to the transmission time of the first and the at least second clock signal,

there is absolutely no suggestion or rationale for combining the teachings of these two reference in an attempt to reach Applicant's claimed subject matter, and, furthermore, Applicant respectfully submits that a person of ordinary skill in the art, because of the quite different synchronizing methods taught by these respective references, would not have considered it obvious to combine the teachings of these two references. In fact, even if the teachings of the

two references were, for some unknown reason, combined, there would not be produced the subject matter of each of Applicant's pending claims.

Thus, Applicant respectfully submits that the Examiner's conclusory statement,

Hence, it is advantageous to the use an adjustment factor based on the delay (transmission time) for the second clock in order for the clocks of the two modules to be synchronized.

must be based only on the prohibited use of hindsight gained from the Examiner's knowledge of Applicant's own disclosure as to what is "advantageous", as there is no other basis for this conclusory statement.

Even though Applicant does not acquiesce in this statutory rejection, Applicant has canceled claim 2, and added its limitation to independent claims 1 and 11. Again, the limitation of claim 2 is not disclosed in the two cited references (as admitted by the Examiner).

Applicant has also added new dependent claims 14-20 which require the first and second modules to be spaced-apart printed circuit boards and/or require bus lines along which the first and second clock signals are transmitted between modules.

In addition, Applicant has amended the independent claims 1 and 7-11 to require the first and second modules to be within (or contained within) a single telecommunication device. Thus, all of Applicant's claims 1 and 3-20 are now limited to the internal synchronization of at least two modules within a single telecommunication device (such as the telecommunication junction or crossconnect described, for example, in Applicant's specification at page 9, lines 25-28. The recited "bus lines" also finds support in this passage and also at page 1, lines 13-27.

Applicant's invention is a two-step synchronization: The master (i.e., first) module transmits a first clock signal to the slave module. The slave (i.e., second) module synchronizes its clock generator to the received signal. Both modules run, and thus also their clock generators, at exactly the same frequency. However, there is still a mismatch, which is a mismatch in phase. Thus, the second module transmits a clock signal from its clock generator, now synchronized (in frequency), back to the first module which determines a phase difference. This information is then passed back to the second module that now makes the fine adjustment of the clock phase.

This method and arrangement certainly are different from the teaching of both Abreu and Lungh, alone or in combination.

In Abreu, there are three units, namely the reference base station, the mobile station and the unsynchronized base station. The mobile station synchronizes to the reference base station, and then enters into a dialogue with the unsynchronized base station. There is **no** signal **passed back to the reference base station** such as is **required** by the claimed invention.

The Examiner views, in a first point of view, Abreu's reference base station as Applicant's claimed "first module", and Abreu's mobile station as the claimed "second module", in an attempt to show that a first clock signal is passed from the first to the second module. Then, the Examiner **changes** his point of view by 180 degrees and views, in a second attempt, Abreu's mobile station as the claimed "first" module, and Abreu's unsynchronized base station as the claimed "second" module to show passing of a second clock signal.

Such a claim construction/interpretation is clearly **improper**. The claimed first module is and **remains** the "first" module, and the claimed second module is and **remains** the "second"

module. Once the Examiner has viewed one Abreu device as the "first" and the other as the "second", the Examiner must be bound to this view. Moreover, Applicant's invention does **not make sense in the context of a mobile radio network (Abreu)**, because a frequency synchronization (i.e., Applicant's first synchronization step) is sufficiently accurate for mobile radio applications, and no phase synchronization is required at all. Thus, the skilled artisan would **not be motivated** to improve Abreu's synchronization method **in any way**.

Lungh, on the other hand, teaches a synchronization method where (1) a first timing unit sends a first command message, including a first parameter, to a second timing unit, (2) the second timing unit sends back a response message including a second parameter, and (3) the first timing unit determines therefrom an adjustment value for the second timing unit. There is **no** first step frequency synchronization and subsequent second step phase synchronization, as **required** by Applicant's claims. Moreover, Lundh's messages are not timing signals. Finally, there is no motivation in Lundh to do frequency and phase synchronization because such are not required in mobile radio networks.

Thus, there is nothing an artisan can learn from either Abreu or Lundh, alone or in combination, that would help the artisan with the problem of internal synchronization of modules in a complex telecommunication device such as a telecommunication junction (crossconnect).

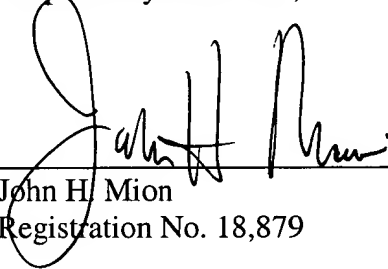
In summary, then, Applicant respectfully requests the Examiner to reconsider and withdraw the objection to the disclosure and the rejection under 35 U.S.C. § 103(a), and to find the application to be in condition for allowance with claims 1 and 3-20; however, if for any reason the Examiner feels that the application is not now in condition for allowance, the

AMENDMENT UNDER 37 C.F.R. § 1.111  
U.S. APPLN. NO. 09/810,250

Examiner is respectfully requested to **call the undersigned attorney** to discuss any unresolved issues and to expedite the disposition of the application.

Applicant hereby petitions for any extension of time which may be required to maintain the pendency of this application, and any required fee for such extension is to be charged to Deposit Account No. 19-4880. The Commissioner is also authorized to charge any additional fees under 37 C.F.R. § 1.16 and/or § 1.17 necessary to keep this application pending in the Patent and Trademark Office or credit any overpayment to said Deposit Account No. 19-4880.

Respectfully submitted,

  
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**23373**

CUSTOMER NUMBER

Date: June 2, 2004